Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

IN THE CLAIMS:

1. (Original) A method for the treatment or prophylaxis of arthritis in a subject, said method comprising administering to the subject an effective amount of an agent which inhibits the activity of granulocyte-colony stimulating factor (G-CSF) or a functional or structural homolog thereof or granulocyte-colony stimulating factor receptor (G-CSFR) or a structural or functional homolog thereof and/or which reduces the level of expression of a gene encoding said G-CSF or G-CSFR.

2. (Original) The method of Claim 1 wherein the arthritis is chronic inflammatory arthritis.

3. (Original) The method of Claim 1 wherein the condition is rheumatoid arthritis (RA).

4. (Original) The method of Claim 1 wherein the arthritis is collagen induced arthritis (CIA).

5. (Currently Amended) The method of ~~any one of Claims 1 to 4~~ Claim 1 wherein the subject is an animal or avian species.

6. (Original) The method of Claim 5 wherein the animal is a mammal.

7. (Original) The method of Claim 6 wherein the mammal is a primate.

8. (Original) The method of Claim7 wherein the primate is a human.

9. (Original) The method of Claim 6 wherein the mammal is a rodent.

10. (Original) The method of Claim 9 wherein the rodent is a mouse.

11. (Original) The method of Claim 1 wherein the agent is an antibody raised against G-CSF or G-CSFR.

12. (Original) The method of Claim 11 wherein the antibody is a monoclonal antibody.

13. (Original) The method of Claim 11 wherein the antibody is a polyclonal antibody.

14. (Original) The method of Claim 1 wherein the agent is soluble G-CSFR or a functional homolog, analog or derivative thereof.

15. (Original) The method of Claim 1 wherein the agent is a chemical analog of G-CSF.

16. (Original) The method of Claim 1 wherein the agent is a protein.

17. (Currently Amended) The method of ~~any one of Claims 14 to 16~~ Claim 14 wherein the agent is a protein.

18. (Original) The method of Claim 1 wherein the gent is a nucleic acid.

19. (Original) The method of Claim 18 wherein the nucleic acid is DNA or RNA and comprises a sense or antisense polynucleotide sequence or a genetic sequence encoding G-CSF or G-CSFR or part or transcript thereof.

20. (Original) The method for identifying an agent which inhibits the activity of

G-CSF or G-CSFR said method comprising contacting putative inhibitory agents with said G-CSF or G-CSFR, wherein the agent is identified as an inhibitory agent by binding or otherwise associating with G-CSF or G-CSFR.

21. (Original) The method for identifying an agent which regulates the expression of a genetic sequence encoding G-CSF or G-CSFR said method comprising contacting putative regulatory agents with said genetic sequence encoding a G-CSF or G-CSFR, wherein the agent is identified as a regulatory agent by binding or otherwise associating with said genetic sequence encoding a G-CSF or G-CSFR.

22. (Original) A pharmaceutical composition comprising an agent which inhibits the activity of G-CSF or G-CSFR in a subject and/or which reduces the level of expression of the gene encoding said G-CSF or G-CSFR in a subject, together with a pharmaceutically acceptable carrier or diluent.

23. (Original) The pharmaceutical composition of Claim 22 wherein the subject is an animal or avian speicies.

24. (Original) The pharmaceutical composition of Claim 23 wherein the animal is a mammal.

25. (Original) The pharmaceutical composition of Claim 24 wherein the mammal is an primate.

26. (Original) The pharmaceutical composition of Claim 25 wherein the primate is a human.

27. (Original) The pharmaceutical composition of Claim 26 wherein the mammal is a rodent.

28. (Original) The pharmaceutical composition of Claim 27 wherein the rodent is a mouse.

29. (Original) The pharmaceutical composition of Claim 22 wherein the agent is an antibody raised against G-CSF or G-CSFR.

30. (Original) The pharmaceutical composition of Claim 29 wherein the antibody is a monoclonal antibody.

31. (Original) The pharmaceutical composition of Claim 29 wherein the antibody is a polyclonal antibody.

32. (Original) The pharmaceutical composition of Claim 22 wherein the agent is soluble G-CSFR or a functional homolog, analog or derivative thereof.

33. (Original) The pharmaceutical composition of Claim 22 wherein the agent is a chemical analog of G-CSF.

34. (Original) The pharmaceutical composition of Claim 22 wherein the agent is a chemical analog of G-CSFR.

35. (Currently Amended) The pharmaceutical composition of ~~any one of Claims 32 to 34~~ Claim 32 wherein the agent is a protein.

36. (Original) The pharmaceutical composition of Claim 22 wherein the agent is a nucleic acid.

37. (Original) The pharmaceutical composition of Claim 36 wherein the nucleic acid is DNA or RNA and comprises a sense or antisense polynucleotide sequence or a genetic sequence endcoding G-CSF or G-CSFR, or fragments thereof, flanking a positive or negative selectable marker.

38. (Original) A targeting or marker-exchange mutagenesis vector useful for inactivating a gene encoding G-CSF or G-CSFR in a cell, said vector comprising two segments of genetic material encoding G-CSF or G-CSFR, or fragments thereof, flanking a positive or negative selectable marker.

39. (Original) A genetically modified animal cell comprising the vector of Claim 35 or part of said vector.

40. (Original) The genetically modified cell of Claim 39 wherein said cell is an embryonic stem cell.

41. (Currently Amended) A genetically modified animal or embryo comprising, being derived from, one or more of the cells of ~~Claims~~ Claim 39 ~~or 40~~, wherein said animal produces low amounts of G-CSF or G-CSFR relative to a ~~non-gentically~~ non-genetically modified animal of the same species.

42. (Currently Amended) The genetically modified animal cell of ~~Claims~~ Claim 39 ~~or 40~~ wherein the animal is a mouse.

43. (Original) The genetically modified animal of Claim 42 wherein the animal is a human.

44. (Currently Amended) A method of producing the genetically modified cell of ~~Claims~~ Claim 39 ~~or 40~~, said method comprising introducing ~~the vector of Claim 38~~ a vector comprising two segments of genetic material encoding G-CSF or G-CSFR, or fragments thereof, flanking a positive or negative selectable marker, into one or more embryonic stem (ES) cell(s) and selecting for expression of the selectable marker gene, wherein the G-CSF and/or G-CSFR gene in the resultant transformed cell(s) is inactivated by homologous recombination with said vector.

45. (Original) A *in-vivo* method for identifying agents capable of inhibiting the activity of G-CSF and/or inhibiting the interaction of G-CSF with G-CSFR and thereby ameliorate the effects of arthritis, said method comprising administering a putative inhibitory agent to an animal, wherein said agent is identified as having interactivity with G-CSF or G-CSFR.